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September 28, 2017

VIA FEDERAL EXPRESS

John S. Lyons  
Acting Executive Director  
Public Service Commission  
211 Sower Boulevard, P.O. Box 615  
Frankfort, Kentucky 40602-0615

RECEIVED  
SEP 29 2017  
PUBLIC SERVICE  
COMMISSION

Re: *In the Matter of: An Examination of the Application of  
the Fuel Adjustment Clause of Big Rivers Electric Corporation  
from November 1, 2016 through April 30, 2017*  
Case No. 2017-00287

Dear Mr. Lyons:

Enclosed for filing in the above-referenced matter are an original and ten copies of Big Rivers Electric Corporation's responses to the First Request for Information from Kentucky Industrial Utility Customers, Inc.

I certify that on this date, a copy of this letter and a copy of the responses were served on all parties listed on the attached service list by first-class mail or overnight courier.

Sincerely,

Tyson Kamuf  
Counsel for Big Rivers Electric Corporation

TAK/abg

Enclosures

cc: Service List

Service List  
PSC Case No. 2017-00287

Michael L. Kurtz, Esq.  
Kurt J. Boehm, Esq.  
Jody Kyler Cohn, Esq.  
BOEHM, KURTZ & LOWRY  
36 East Seventh Street, Suite 1510  
Cincinnati, Ohio 45202

**ORIGINAL**

**RECEIVED**

SEP 29 2017

PUBLIC SERVICE  
COMMISSION



Your Touchstone Energy® Cooperative 

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

**In the Matter of:**

**AN EXAMINATION OF THE APPLICATION )  
OF THE FUEL ADJUSTMENT CLAUSE )  
OF BIG RIVERS ELECTRIC CORPORATION )  
FROM )  
NOVEMBER 1, 2016 THROUGH APRIL 30, 2017 )**

**Case No.  
2017-00287**

**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
dated  
September 18, 2017**

**FILED: September 29, 2017**

**ORIGINAL**

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT  
CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2016 THROUGH APRIL 30, 2017  
CASE NO. 2017-00287**

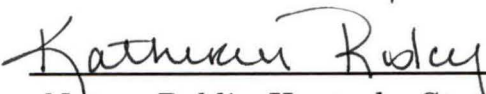
**VERIFICATION**

I, Murray W. (Wayne) O'Bryan, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
\_\_\_\_\_  
Murray W. (Wayne) O'Bryan

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Murray W. (Wayne) O'Bryan  
on this the 28<sup>th</sup> day of September, 2017.

  
\_\_\_\_\_  
Notary Public, Kentucky State at Large  
My Commission Expires 10-31-2020

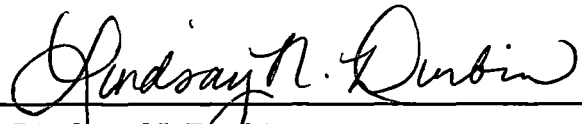


**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT  
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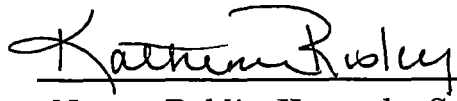
**VERIFICATION**

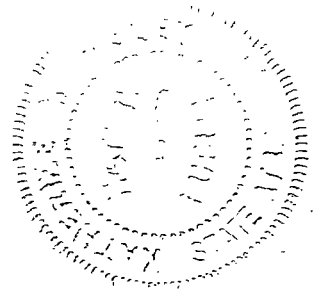
I, Lindsay N. Durbin, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
\_\_\_\_\_  
Lindsay N. Durbin

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

28<sup>th</sup> SUBSCRIBED AND SWORN TO before me by Lindsay N. Durbin on this the  
day of September, 2017.

  
\_\_\_\_\_  
Notary Public, Kentucky State at Large  
My Commission Expires 10.31.2020



**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL ADJUSTMENT  
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**VERIFICATION**

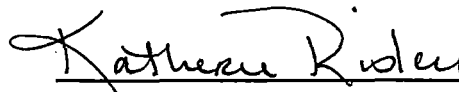
I, Nicholas R. (Nick) Castlen, verify, state, and affirm that the data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



\_\_\_\_\_  
Nicholas R. (Nick) Castlen

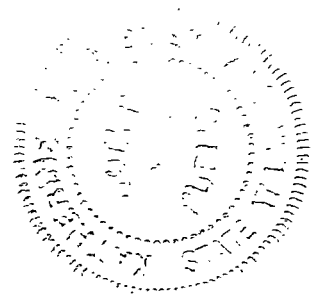
COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Nicholas R. (Nick) Castlen on  
this the 28<sup>th</sup> day of September, 2017.



\_\_\_\_\_  
Notary Public, Kentucky State at Large

My Commission Expires 10-31-2020



**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2016 THROUGH APRIL 30, 2017  
CASE NO. 2017-00287**

**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
Dated September 18, 2017**

**September 29, 2017**

1 **Item 1)** *Please generally describe the process by which Big Rivers*  
2 *allocates fuel costs between native load and off-system sales for Fuel*  
3 *Adjustment Charge (FAC) purposes.*

4

5 **Response)** Big Rivers accounts for its fuel inventory using weighted average  
6 inventory costing. The total cost of coal, pet coke, oil, gas, and propane burned for  
7 generation by each of Big Rivers' units during the month is calculated by  
8 multiplying the volumes (*i.e.*, tons, gallons, or MCF) used for generation by the  
9 weighted average cost per unit for the respective fuel.

10 The total costs of coal, pet coke, oil, gas, and propane burned for  
11 generation by all of Big Rivers' units during the expense month are included in  
12 the Fuel Cost Schedule (Page 2 of Big Rivers' monthly Form A filing), under  
13 Company Generation, for purposes of calculating the total fuel cost to be recovered  
14 from Big Rivers' Members through the Fuel Adjustment Clause (FAC).

15 An overall system weighted average generation fuel cost per net  
16 MWh is calculated each month by dividing the total cost of fuel used for  
17 generation by the net MWh generated (after accounting for line losses). Fuel costs  
18 are then allocated to off-system sales by multiplying the system weighted average  
19 system generation fuel cost per net MWh (after accounting for line losses) by the  
20 total off-system sales volume (MWh) during the month.

21 The total fuel cost allocated to off-system sales each month is  
22 included in the Inter-System Sales Including Interchange-Out line on Big Rivers'

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1 Fuel Cost Schedule, and subtracted from the total fuel expense to be recovered  
2 from Big Rivers' Members for purposes of calculating the monthly FAC factor.

3

4

5 **Witness)** Nicholas R. Castlen

6



**BIG RIVERS ELECTRIC CORPORATION**

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**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
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**September 29, 2017**

1 **Item 2)** *Are Big Rivers' lowest fuel cost generation resources assigned*  
2 *to native load in each hour in the FAC? Please explain.*

3

4 **Response)** No. As described in the response to Item 1, and in accordance with  
5 the requirement of 807 KAR 5:056 that all fuel costs be based on weighted average  
6 inventory costing, Big Rivers accounts for its fuel inventory using weighted  
7 average inventory costing. Similarly, Big Rivers uses the system weighted  
8 average generation fuel cost (\$/MWh) to allocate fuel costs to off-system sales.  
9 The fuel costs allocated to off-system sales are subtracted from the total fuel costs  
10 to be recovered from Big Rivers' Members through the FAC on the Fuel Cost  
11 Schedule (Page 2 of Big Rivers' monthly Form A filing).

12

13

14 **Witness)** Nicholas R. Castlen

15

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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Dated September 18, 2017**

**September 29, 2017**

1 **Item 3)** *Are system average fuel costs assigned to off-system sales in*  
2 *the FAC? Please explain.*

3

4 **Response)** Yes. Please see the response to Item 1 for an explanation of how the  
5 system weighted average generation fuel cost (\$/MWh) is calculated and used to  
6 assign fuel costs to off-system sales for purposes of calculating Big Rivers' monthly  
7 FAC factor.

8

9

10 **Witness)** Nicholas R. Castlen

11

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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Dated September 18, 2017**

**September 29, 2017**

1 **Item 3)** *Are system average fuel costs assigned to off-system sales in*  
2 *the FAC? Please explain.*

3

4 **Response)** Yes. Please see the response to Item 1 for an explanation of how the  
5 system weighted average generation fuel cost (\$/MWh) is calculated and used to  
6 assign fuel costs to off-system sales for purposes of calculating Big Rivers' monthly  
7 FAC factor.

8

9

10 **Witness)** Nicholas R. Castlen

11

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
Dated September 18, 2017**

**September 29, 2017**

1 **Item 4)** *Are system average fuel costs assigned to native load in the*  
2 *FAC? Please explain.*

3

4 **Response)** The fuel costs assigned to native load, for purposes of calculating Big  
5 Rivers' monthly FAC factor, are calculated in the Fuel Cost Schedule on Page 2 of  
6 Big Rivers' monthly Form A filing based on Big Rivers' FAC tariff in accordance  
7 with 807 KAR 5:056.

8 Because the calculation of fuel costs recoverable through the FAC  
9 (*i.e.*, assigned to native load) includes adjustments for MISO Make Whole  
10 Payments and forced outages, the actual average generation fuel cost (\$/MWh)  
11 assigned to native load generally does not equal the overall system weighted  
12 average generation fuel cost. Please see Attachment for Response to Item 6 for  
13 the actual average generation fuel costs (\$/MWh) assigned to native load in the  
14 FAC during the review period.

15

16

17 **Witness)** Nicholas R. Castlen

18

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
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1 **Item 5)** *Please describe how purchase power costs are allocated*  
2 *between native load and off-system sales in the FAC process.*

3

4 **Response)** When calculating the FAC purchases, purchased power is allocated to  
5 off-system sales only when the purchases are made to specifically support such  
6 sales. Those purchases are designated as Back-to-Back and are netted out in the  
7 FAC to have a zero impact to Big Rivers' Members.

8

9

10 **Witness)** Wayne O'Bryan

11

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
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**September 29, 2017**

1 **Item 6)** *For each of the six months under review, please provide the*  
2 *fuel cost in \$/MWH that was assigned to: 1) native load; and 2) off-system*  
3 *sales.*

4

5 **Response)** Please see attachment to this response.

6

7

8 **Witness)** Nicholas R. Castlen

9

**Big Rivers Electric Corporation**  
**Average Generation Fuel Cost Assigned to Native Load and Off-System Sales in FAC**  
**(\$/MWh)**  
**November 2016 through April 2017**

|   | <u>Nov-16</u>       | <u>Dec-16</u>       | <u>Jan-17</u>       | <u>Feb-17</u>       | <u>Mar-17</u>       | <u>Apr-17</u>       | <u>Total</u>         |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| <b>Native Load - Generation Fuel Costs:</b>                                     |                     |                     |                     |                     |                     |                     |                      |
| (+) Coal Burned   | \$ 10,545,722       | \$ 14,601,582       | \$ 12,602,110       | \$ 6,215,542        | \$ 8,453,818        | \$ 9,185,498        | \$ 61,604,272        |
| (+) Pet Coke Burned   | 1,407,158           | 1,460,090           | 1,924,610           | 674,208             | 1,339,461           | 810,929             | 7,616,456            |
| (+) Oil Burned  | 238,258             | 302,108             | 138,215             | 213,769             | 242,704             | 256,906             | 1,391,960            |
| (+) Gas Burned  | 3,080               | 55,408              | 12,670              | 7,674               | 6,159               | -                   | 84,991               |
| (+) Propane Burned  | -                   | -                   | -                   | -                   | -                   | -                   | -                    |
| (-) MISO Make Whole Payments  | 2,110               | 15,222              | 6,508               | 582                 | 7,468               | -                   | 31,890               |
| (+) Net Fuel Cost Adjustment for Forced Outages <sup>(1)</sup>                  | (76,576)            | (60,896)            | (179,523)           | (67,362)            | (126,735)           | (203,746)           | (714,838)            |
| (-) Fuel (supplemental and back-up energy to Smelters)                          | -                   | -                   | -                   | -                   | -                   | -                   | -                    |
| (-) Fuel (Domtar back-up / imbalance generation)                                | -                   | -                   | -                   | -                   | -                   | -                   | -                    |
| (-) Fuel Cost Assigned to Off-System Sales of Generation                        | 8,319,336           | 11,063,491          | 9,846,618           | 3,756,644           | 5,769,064           | 7,200,859           | 45,956,012           |
| <b>Total Fuel Cost Assigned to Native Load</b>                                  | <b>\$ 3,796,196</b> | <b>\$ 5,279,579</b> | <b>\$ 4,644,956</b> | <b>\$ 3,286,605</b> | <b>\$ 4,138,875</b> | <b>\$ 2,848,728</b> | <b>\$ 23,994,939</b> |
| Div. By: Native Load Sales from Generation (MWh)                                | 164,361.130         | 215,737.089         | 197,189.810         | 125,947.203         | 167,855.330         | 123,717.554         | 994,808.116          |
| <b>Average Generation Fuel Cost for Native Load (\$/MWh)<sup>(2)</sup></b>      | <b>\$ 23.10</b>     | <b>\$ 24.47</b>     | <b>\$ 23.56</b>     | <b>\$ 26.10</b>     | <b>\$ 24.66</b>     | <b>\$ 23.03</b>     | <b>\$ 24.12</b>      |
| <b>Off-System Sales - Generation Fuel Costs:</b>                                |                     |                     |                     |                     |                     |                     |                      |
| Fuel Cost Assigned to Off-System Sales of Generation                            | \$ 8,319,336        | \$ 11,063,491       | \$ 9,846,618        | \$ 3,756,644        | \$ 5,769,064        | \$ 7,200,859        | \$ 45,956,012        |
| Div. By: Off-System Sales from Generation (MWh)                                 | 352,903.028         | 445,677.218         | 401,919.160         | 141,041.628         | 226,619.935         | 291,863.591         | 1,860,024.56         |
| <b>Average Generation Fuel Cost for Off-System Sales (\$/MWh)<sup>(3)</sup></b> | <b>\$ 23.57</b>     | <b>\$ 24.82</b>     | <b>\$ 24.50</b>     | <b>\$ 26.64</b>     | <b>\$ 25.46</b>     | <b>\$ 24.67</b>     | <b>\$ 24.71</b>      |

**Notes:**

(1) Net Fuel Cost Adjustment for Forced Outages = Fuel (assigned cost during Forced Outage) - Fuel (substitute cost for Forced Outage) - Identifiable fuel cost (substitute for Forced Outage)

(2) Because the calculation of generation fuel costs recoverable through the FAC (i.e. assigned to native load) includes adjustments for MISO Make Whole Payments and Forced Outages, the average generation fuel cost assigned to Native Load in the FAC does not equal the overall system weighted average generation fuel cost (\$/MWh) each month.

(3) Average generation fuel cost for off-system sales equals Big Rivers' overall system weighted average generation fuel cost (\$/MWh) for the respective month.

Case No. 2017-00287

Attachment for Response to KIUC Item 6

Witness: Nicholas R. Castlen

Page 1 of 1

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2016 THROUGH APRIL 30, 2017  
CASE NO. 2017-00287**

**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
Dated September 18, 2017**

**September 29, 2017**

1 **Item 7)** *For each of the six months under review, please provide the*  
2 *purchase power costs in \$/MWH that was assigned to: 1) native load; and*  
3 *2) off-system sales.*

4

5 **Response)** Please see attachment to this response.

6

7

8 **Witness)** Nicholas R. Castlen

9



**Big Rivers Electric Corporation**  
**Average Purchased Power Cost Assigned to Native Load and Off-System Sales in FAC**  
**(\$/MWh)**

**November 2016 through April 2017**

|   | <u>Nov-16</u>   | <u>Dec-16</u>   | <u>Jan-17</u>   | <u>Feb-17</u>   | <u>Mar-17</u>   | <u>Apr-17</u>   | <u>Total</u>    |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Native Load - Purchased Power Costs:</b>   |                 |                 |                 |                 |                 |                 |                 |
| (+) Total Energy Cost of Purchased Power  | \$ 6,511,037    | \$ 8,168,698    | \$ 13,667,476   | \$ 11,031,963   | \$ 4,910,299    | \$ 3,982,737    | \$ 48,272,210   |
| (-) Total Energy Cost of Purchased Power for Off-System Sales                         | 5,093,514       | 6,361,026       | 11,629,883      | 8,893,647       | 3,459,402       | 2,088,038       | 37,525,510      |
| (-) Purchases for Supp. & Back-Up Energy to Smelters                                  | -               | -               | -               | -               | -               | -               | -               |
| (-) Purchases for Domtar Back-Up Power  | 115,628         | 290,598         | 161,505         | 151,128         | 134,181         | 88,250          | 941,290         |
| (-) Purchases Above Highest Cost Units  | 69,329          | 81              | -               | 517             | -               | 6,291           | 76,218          |
| Total Purchased Power Cost Assigned to Native Load                                    | \$ 1,232,566    | \$ 1,516,993    | \$ 1,876,088    | \$ 1,986,671    | \$ 1,316,716    | \$ 1,800,158    | \$ 9,729,192    |
| Divided By: Native Load Sales from Purchased Power Including<br>Net Interchange (MWh) | 72,238.447      | 88,023.232      | 95,793.015      | 110,180.799     | 80,887.323      | 94,601.034      | 541,723.850     |
| <b>Average Purchased Power Cost for Native Load (\$/MWh)</b>                          | <b>\$ 17.06</b> | <b>\$ 17.23</b> | <b>\$ 19.58</b> | <b>\$ 18.03</b> | <b>\$ 16.28</b> | <b>\$ 19.03</b> | <b>\$ 17.96</b> |
| <b>Off-System Sales - Purchased Power Costs:</b>                                      |                 |                 |                 |                 |                 |                 |                 |
| Total Energy Cost of Purchased Power for Off-System Sales                             | \$ 5,093,514    | \$ 6,361,026    | \$ 11,629,883   | \$ 8,893,647    | \$ 3,459,402    | \$ 2,088,038    | \$ 37,525,510   |
| Divided By: Off-System Sales from Purchased Power (MWh)                               | 177,600.000     | 182,400.000     | 371,800.000     | 336,200.000     | 108,373.300     | 31,151.240      | 1,207,524.540   |
| <b>Average Generation Fuel Cost for Off-System Sales (\$/MWh)</b>                     | <b>\$ 28.68</b> | <b>\$ 34.87</b> | <b>\$ 31.28</b> | <b>\$ 26.45</b> | <b>\$ 31.92</b> | <b>\$ 67.03</b> | <b>\$ 31.08</b> |

Case No. 2017-00287

Attachment for Response to KIUC Item 7

Witness: Nicholas R. Castlen

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**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
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1 **Item 8)** *Please confirm that the fuel costs of Wilson were included in*  
2 *the FAC process for each of the six months under review. If the fuel costs*  
3 *of Wilson were not included in the FAC please explain why not.*

4

5 **Response)** Confirmed.

6

7

8 **Witness)** Nicholas R. Castlen

9

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
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**September 29, 2017**

1 **Item 9) For each month during the period under review, please**  
2 **provide the following.**

3

4 **a. Native load sales (MWH);**

5 **b. Generation by generating unit, and provide the allocation**  
6 **of the generation to native load customers and off-system**  
7 **sales (MWH);**

8 **c. Purchase power energy (MWH), and provide the allocation**  
9 **of the purchases to native load customers and off-system**  
10 **sales (MWH);**

11 **d. Losses (MWH);**

12 **e. Provide evidence of an energy balance between sales and**  
13 **generation for each period. If any other categories of**  
14 **energy are required to complete the energy balance, please**  
15 **provide those categories individually;**

16 **f. Generation fuel costs by generating unit, and provide the**  
17 **allocation of the generation fuel costs to native load**  
18 **customers and off-system sales;**

19 **g. Purchase power costs and the allocation of the purchase**  
20 **power costs to native load and off-system sales;**

21 **h. If any other categories of costs are allocated to either**  
22 **native load or off-system sales that have not been**

**BIG RIVERS ELECTRIC CORPORATION**

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1 *included in the above two questions, please provide those*  
2 *fuel costs by individual categories;*

3

4 *Please provide all data electronically, in spreadsheet format with all*  
5 *formulas intact.*

6

7 **Response)**

8 a. Please see Attachment No. 1 to this response for the native load  
9 sales volumes (MWh) for each month during the review period.

10 b. Please see Attachment No. 1 to this response for the net  
11 generation by unit and the allocation of generation to native  
12 load customers and off-system sales (MWh) for each month  
13 during the review period.

14 c. Please see Attachment No. 1 to this response for the purchased  
15 power (MWh) and allocation of the purchases to native load  
16 customers and off-system sales for each month during the  
17 review period.

18 d. Please see Attachment No. 1 to this response for the system  
19 losses (MWh) for each month during the review period.

20 e. Please see Attachment No. 1 to this response for evidence of an  
21 energy balance between sales and generation (MWh) for each  
22 month during the review period.

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2016 THROUGH APRIL 30, 2017  
CASE NO. 2017-00287**

**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
Dated September 18, 2017**

**September 29, 2017**

- 1           f. Please see Attachment No. 2 to this response for the generation  
2 fuel costs by generating unit for each month during the review  
3 period. Please see the Attachment for Response to Item 6 for  
4 the allocation of generation fuel costs to native load customers  
5 and off-system sales for each month during the review period.  
6           g. Please see the Attachment for Response to Item 7 for the  
7 purchase power costs and the allocation of purchase power costs  
8 to native load customers and off-system sales for each month  
9 during the review period.  
10          h. Not Applicable.

11  
12           As requested, all supporting calculations and documentation are also  
13 provided in Excel spreadsheet format, with all formulas intact, on the CD  
14 accompanying these responses.

15  
16  
17 **Witness)**   Nicholas R. Castlen  
18

**Big Rivers Electric Corporation  
Case No. 2017-00287**

Sources:

|   | Nov-16<br>(MWh)    | Dec-16<br>(MWh)    | Jan-17<br>(MWh)      | Feb-17<br>(MWh)    | Mar-17<br>(MWh)    | Apr-17<br>(MWh)    | 6-Mo. Total<br>(Nov-16 to Apr-17) |
|---|--------------------|--------------------|----------------------|--------------------|--------------------|--------------------|-----------------------------------|
| <b>Net Generation by Unit:</b>                |                    |                    |                      |                    |                    |                    |                                   |
| Reid - Unit 1                                 | (1,394.000)        | (1,589.000)        | (1,625.000)          | (1,488.000)        | (1,548.000)        | (1,431.000)        | (9,075.000)                       |
| Coleman - Unit 1                              | (242.000)          | (334.000)          | (298.000)            | (243.000)          | (288.000)          | (232.000)          | (1,637.000)                       |
| Coleman - Unit 2                              | (242.000)          | (334.000)          | (297.000)            | (244.000)          | (288.000)          | (232.000)          | (1,637.000)                       |
| Coleman - Unit 3                              | (242.000)          | (333.000)          | (297.000)            | (244.000)          | (288.000)          | (232.000)          | (1,636.000)                       |
| Reid CT                                       | (17.000)           | 578.000            | 49.000               | 90.000             | 17.000             | (50.000)           | 667.000                           |
| Wilson  | 240,258.820        | 273,206.790        | 277,894.950          | 143,232.610        | 194,753.880        | 212,626.630        | 1,341,973.680                     |
| Station Two - Unit 1                          | 45,431.348         | 54,653.233         | 40,089.448           | 27,646.583         | 28,008.194         | 20,703.137         | 216,531.943                       |
| Station Two - Unit 2                          | 43,955.652         | 56,561.767         | 39,625.552           | 12,028.417         | 44,792.806         | 31,790.863         | 228,755.057                       |
| Green - Unit 1                                | 88,531.425         | 154,347.274        | 134,573.239          | 33,539.595         | 82,573.028         | 128,736.934        | 622,301.495                       |
| Green - Unit 2                                | 117,391.977        | 149,681.853        | 131,738.073          | 73,186.634         | 64,941.261         | 40,038.907         | 576,978.705                       |
| Total Net Generation                          | 533,432.222        | 686,438.917        | 621,453.262          | 287,504.839        | 412,674.169        | 431,719.471        | 2,973,222.880                     |
| <b>Purchased Power &amp; Net Interchange:</b> |                    |                    |                      |                    |                    |                    |                                   |
| Total Purchased Power                         | 242,687.803        | 255,720.206        | 452,080.250          | 434,880.950        | 176,835.562        | 115,709.741        | 1,677,914.512                     |
| Net Interchange-In/(Out)                      | 11,809.724         | 22,872.000         | 20,980.000           | 17,448.023         | 16,660.000         | 13,265.584         | 103,035.331                       |
| Total Purchased Power & Net Interchange       | 254,497.527        | 278,592.206        | 473,060.250          | 452,328.973        | 193,495.562        | 128,975.325        | 1,780,949.843                     |
| <b>Total Sources</b>                          | <b>787,929.749</b> | <b>965,031.123</b> | <b>1,094,513.512</b> | <b>739,833.812</b> | <b>606,169.731</b> | <b>560,694.796</b> | <b>4,754,172.723</b>              |

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Attachment No. 1 for Response to KIUC Item 9

Witness: Nicholas R. Castlen

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**Big Rivers Electric Corporation**  
**Case No. 2017-00287**

|  | <b>Nov-16</b><br>(MWh) | <b>Dec-16</b><br>(MWh) | <b>Jan-17</b><br>(MWh) | <b>Feb-17</b><br>(MWh) | <b>Mar-17</b><br>(MWh) | <b>Apr-17</b><br>(MWh) | <b>6-Mo. Total</b><br>(Nov-16 to Apr-17) |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
| <b>Sales and Losses:</b>   |                        |                        |                        |                        |                        |                        |  |
| <b>Native Load Sales:</b>  |                        |                        |                        |                        |                        |                        |  |
| Native Load Sales from Generation                                | 164,361.130            | 215,737.089            | 197,189.810            | 125,947.203            | 167,855.330            | 123,717.554            | 994,808.116                              |
| Native Load Sales from Purchased Power Including Net Interchange | 72,238.447             | 88,023.232             | 95,793.015             | 110,180.799            | 80,887.323             | 94,601.034             | 541,723.850                              |
| <b>Total Native Load Sales</b>                                   | <b>236,599.577</b>     | <b>303,760.321</b>     | <b>292,982.825</b>     | <b>236,128.002</b>     | <b>248,742.653</b>     | <b>218,318.588</b>     | <b>1,536,531.966</b>                     |
|  | -                      | -                      | -                      | -                      | -                      | -                      | -  |
| <b>Off-System Sales:</b>   |                        |                        |                        |                        |                        |                        |  |
| Off-System Sales from Generation                                 | 352,903.028            | 445,677.218            | 401,919.160            | 141,041.628            | 226,619.935            | 291,863.591            | 1,860,024.560                            |
| Off-System Sales from Purchased Power                            | 177,600.000            | 182,400.000            | 371,800.000            | 336,200.000            | 108,373.300            | 31,151.240             | 1,207,524.540                            |
| <b>Total Off-System Sales</b>                                    | <b>530,503.028</b>     | <b>628,077.218</b>     | <b>773,719.160</b>     | <b>477,241.628</b>     | <b>334,993.235</b>     | <b>323,014.831</b>     | <b>3,067,549.100</b>                     |
|  |                        |                        |                        |                        |                        |                        |  |
| <b>Other Sales:</b>  |                        |                        |                        |                        |                        |                        |  |
| Domtar Back-Up Power Sales from Generation                       | -                      | -                      | -                      | -                      | -                      | -                      | -  |
| Domtar Back-Up Power Sales from Purchased Power                  | 4,659.080              | 8,168.974              | 5,467.235              | 5,948.174              | 4,234.939              | 3,223.051              | 31,701.453                               |
| <b>Total Domtar Back-Up Power Sales</b>                          | <b>4,659.080</b>       | <b>8,168.974</b>       | <b>5,467.235</b>       | <b>5,948.174</b>       | <b>4,234.939</b>       | <b>3,223.051</b>       | <b>31,701.453</b>                        |
|  |                        |                        |                        |                        |                        |                        |  |
| <b>System Losses:</b>  |                        |                        |                        |                        |                        |                        |  |
| Total System Losses  | 16,168.064             | 25,024.610             | 22,344.292             | 20,516.008             | 18,198.904             | 16,138.326             | 118,390.204                              |
| <b>Total Sales and Losses</b>                                    | <b>787,929.749</b>     | <b>965,031.123</b>     | <b>1,094,513.512</b>   | <b>739,833.812</b>     | <b>606,169.731</b>     | <b>560,694.796</b>     | <b>4,754,172.723</b>                     |
|  |                        |                        |                        |                        |                        |                        |  |
| <b>Total Sources less Total Sales and Losses</b>                 | <b>-</b>               | <b>-</b>               | <b>-</b>               | <b>-</b>               | <b>-</b>               | <b>-</b>               | <b>-</b>                                 |

**Big Rivers Electric Corporation**  
**Case No. 2017-00287**

|                                     | <u>Nov-16</u>      | <u>Dec-16</u>      | <u>Jan-17</u>      | <u>Feb-17</u>      | <u>Mar-17</u>      | <u>Apr-17</u>      | <u>Total</u>         |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| <b>Net Generation by Unit (MWh)</b> |                    |                    |                    |                    |                    |                    |                      |
| Reid - Unit 1                       | (1,394.000)        | (1,589.000)        | (1,625.000)        | (1,488.000)        | (1,548.000)        | (1,431.000)        | (9,075.000)          |
| Coleman - Unit 1                    | (242.000)          | (334.000)          | (298.000)          | (243.000)          | (288.000)          | (232.000)          | (1,637.000)          |
| Coleman - Unit 2                    | (242.000)          | (334.000)          | (297.000)          | (244.000)          | (288.000)          | (232.000)          | (1,637.000)          |
| Coleman - Unit 3                    | (242.000)          | (333.000)          | (297.000)          | (244.000)          | (288.000)          | (232.000)          | (1,636.000)          |
| Reid CT                             | (17.000)           | 578.000            | 49.000             | 90.000             | 17.000             | (50.000)           | 667.000              |
| Wilson                              | 240,258.820        | 273,206.790        | 277,894.950        | 143,232.610        | 194,753.880        | 212,626.630        | 1,341,973.680        |
| Station Two - Unit 1                | 45,431.348         | 54,653.233         | 40,089.448         | 27,646.583         | 28,008.194         | 20,703.137         | 216,531.943          |
| Station Two - Unit 2                | 43,955.652         | 56,561.767         | 39,625.552         | 12,028.417         | 44,792.806         | 31,790.863         | 228,755.057          |
| Green - Unit 1                      | 88,531.425         | 154,347.274        | 134,573.239        | 33,539.595         | 82,573.028         | 128,736.934        | 622,301.495          |
| Green - Unit 2                      | 117,391.977        | 149,681.853        | 131,738.073        | 73,186.634         | 64,941.261         | 40,038.907         | 576,978.705          |
| <b>Total</b>                        | <b>533,432.222</b> | <b>686,438.917</b> | <b>621,453.262</b> | <b>287,504.839</b> | <b>412,674.169</b> | <b>431,719.471</b> | <b>2,973,222.880</b> |



**Big Rivers Electric Corporation**  
**Case No. 2017-00287**

|                               |                      | <u>Nov-16</u>        | <u>Dec-16</u>        | <u>Jan-17</u>        | <u>Feb-17</u>       | <u>Mar-17</u>       | <u>Apr-17</u>       | <u>Total</u>         |
|-------------------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|----------------------|
| <b>Generation Fuel Costs:</b> |                      |                      |                      |                      |                     |                     |                     |                      |
| <i>Coal</i>                   |                      |                      |                      |                      |                     |                     |                     |                      |
| Coal                          | Reid - Unit 1        | \$ -                 | \$ -                 | \$ -                 | \$ -                | \$ -                | \$ -                | -                    |
| Coal                          | Coleman - Unit 1     | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Coal                          | Coleman - Unit 2     | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Coal                          | Coleman - Unit 3     | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Coal                          | Reid CT              | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Coal                          | Wilson               | 4,259,749            | 5,085,578            | 5,269,742            | 2,731,514           | 3,841,015           | 4,904,538           | 26,092,136           |
| Coal                          | Station Two - Unit 1 | 1,179,891            | 1,496,365            | 1,107,661            | 728,130             | 757,000             | 535,382             | 5,804,429            |
| Coal                          | Station Two - Unit 2 | 1,190,867            | 1,554,677            | 1,091,763            | 346,478             | 1,200,094           | 839,860             | 6,223,741            |
| Coal                          | Green - Unit 1       | 1,732,479            | 3,298,922            | 2,585,003            | 838,904             | 1,421,540           | 2,217,821           | 12,094,668           |
| Coal                          | Green - Unit 2       | 2,182,736            | 3,166,040            | 2,547,941            | 1,570,516           | 1,234,168           | 687,897             | 11,389,298           |
| <b>Total Coal</b>             |                      | <b>\$ 10,545,722</b> | <b>\$ 14,601,582</b> | <b>\$ 12,602,110</b> | <b>\$ 6,215,542</b> | <b>\$ 8,453,818</b> | <b>\$ 9,185,498</b> | <b>\$ 61,604,271</b> |
| <i>Pet Coke</i>               |                      |                      |                      |                      |                     |                     |                     |                      |
| Pet Coke                      | Reid - Unit 1        | \$ -                 | \$ -                 | \$ -                 | \$ -                | \$ -                | \$ -                | -                    |
| Pet Coke                      | Coleman - Unit 1     | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Pet Coke                      | Coleman - Unit 2     | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Pet Coke                      | Coleman - Unit 3     | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Pet Coke                      | Reid CT              | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Pet Coke                      | Wilson               | 881,316              | 899,818              | 946,584              | 548,885             | 718,211             | 57,641              | 4,052,455            |
| Pet Coke                      | Station Two - Unit 1 | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Pet Coke                      | Station Two - Unit 2 | -                    | -                    | -                    | -                   | -                   | -                   | -                    |
| Pet Coke                      | Green - Unit 1       | 194,103              | 259,610              | 501,200              | -                   | 385,502             | 552,346             | 1,892,761            |
| Pet Coke                      | Green - Unit 2       | 331,738              | 300,662              | 476,826              | 125,323             | 235,748             | 200,943             | 1,671,241            |
| <b>Total Pet Coke</b>         |                      | <b>\$ 1,407,158</b>  | <b>\$ 1,460,090</b>  | <b>\$ 1,924,610</b>  | <b>\$ 674,208</b>   | <b>\$ 1,339,461</b> | <b>\$ 810,929</b>   | <b>\$ 7,616,457</b>  |

**Big Rivers Electric Corporation  
Case No. 2017-00287**

|            |                      | <u>Nov-16</u>     | <u>Dec-16</u>     | <u>Jan-17</u>     | <u>Feb-17</u>     | <u>Mar-17</u>     | <u>Apr-17</u>     | <u>Total</u>        |
|------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| <i>Oil</i> |                      |                   |                   |                   |                   |                   |                   |                     |
| Oil        | Reid - Unit 1        | \$ -              | \$ -              | \$ -              | \$ -              | \$ -              | \$ -              | -                   |
| Oil        | Coleman - Unit 1     | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Oil        | Coleman - Unit 2     | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Oil        | Coleman - Unit 3     | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Oil        | Reid CT              | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Oil        | Wilson               | 149,243           | 210,856           | 91,609            | 181,169           | 49,989            | 135,667           | 818,532             |
| Oil        | Station Two - Unit 1 | 653               | 5,836             | 8,137             | 1,178             | 40,341            | 465               | 56,611              |
| Oil        | Station Two - Unit 2 | 5,776             | 5,273             | 7,447             | 15,835            | 10,424            | 13,108            | 57,863              |
| Oil        | Green - Unit 1       | 74,989            | 60,151            | 13,851            | 9,632             | 67,019            | 31,279            | 256,922             |
| Oil        | Green - Unit 2       | 7,596             | 19,993            | 17,172            | 5,956             | 74,930            | 76,386            | 202,032             |
|            | <b>Total Oil</b>     | <b>\$ 238,258</b> | <b>\$ 302,108</b> | <b>\$ 138,215</b> | <b>\$ 213,769</b> | <b>\$ 242,704</b> | <b>\$ 256,906</b> | <b>\$ 1,391,959</b> |
| <i>Gas</i> |                      |                   |                   |                   |                   |                   |                   |                     |
| Gas        | Reid - Unit 1        | \$ -              | \$ -              | \$ -              | \$ -              | \$ -              | \$ -              | -                   |
| Gas        | Coleman - Unit 1     | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Coleman - Unit 2     | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Coleman - Unit 3     | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Reid CT              | 3,080             | 55,408            | 12,670            | 7,674             | 6,159             | -                 | 84,991              |
| Gas        | Wilson               | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Station Two - Unit 1 | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Station Two - Unit 2 | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Green - Unit 1       | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
| Gas        | Green - Unit 2       | -                 | -                 | -                 | -                 | -                 | -                 | -                   |
|            | <b>Total Gas</b>     | <b>\$ 3,080</b>   | <b>\$ 55,408</b>  | <b>\$ 12,670</b>  | <b>\$ 7,674</b>   | <b>\$ 6,159</b>   | <b>\$ -</b>       | <b>\$ 84,991</b>    |

**Big Rivers Electric Corporation**  
**Case No. 2017-00287**

|                                   | <u>Nov-16</u>        | <u>Dec-16</u>        | <u>Jan-17</u>        | <u>Feb-17</u>       | <u>Mar-17</u>        | <u>Apr-17</u>        | <u>Total</u>         |
|-----------------------------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|
| <b>Total Fuel Expense by Unit</b> |                      |                      |                      |                     |                      |                      |                      |
| Reid - Unit 1                     | \$ -                 | \$ -                 | \$ -                 | \$ -                | \$ -                 | \$ -                 | \$ -                 |
| Coleman - Unit 1                  | -                    | -                    | -                    | -                   | -                    | -                    | -                    |
| Coleman - Unit 2                  | -                    | -                    | -                    | -                   | -                    | -                    | -                    |
| Coleman - Unit 3                  | -                    | -                    | -                    | -                   | -                    | -                    | -                    |
| Reid CT                           | 3,080                | 55,408               | 12,670               | 7,674               | 6,159                | -                    | 84,991               |
| Wilson                            | 5,290,308            | 6,196,252            | 6,307,935            | 3,461,567           | 4,609,216            | 5,097,845            | 30,963,124           |
| Station Two - Unit 1              | 1,180,544            | 1,502,201            | 1,115,797            | 729,308             | 797,342              | 535,847              | 5,861,040            |
| Station Two - Unit 2              | 1,196,644            | 1,559,950            | 1,099,210            | 362,313             | 1,210,518            | 852,969              | 6,281,603            |
| Green - Unit 1                    | 2,001,571            | 3,618,682            | 3,100,054            | 848,536             | 1,874,060            | 2,801,446            | 14,244,350           |
| Green - Unit 2                    | 2,522,071            | 3,486,695            | 3,041,939            | 1,701,795           | 1,544,846            | 965,225              | 13,262,571           |
| <b>Total Fuel for Generation</b>  | <b>\$ 12,194,218</b> | <b>\$ 16,419,188</b> | <b>\$ 14,677,605</b> | <b>\$ 7,111,193</b> | <b>\$ 10,042,142</b> | <b>\$ 10,253,333</b> | <b>\$ 70,697,678</b> |
| <b>Total Fuel Expense by Fuel</b> |                      |                      |                      |                     |                      |                      |                      |
| Coal                              | \$ 10,545,722        | \$ 14,601,582        | \$ 12,602,110        | \$ 6,215,542        | \$ 8,453,818         | \$ 9,185,498         | \$ 61,604,271        |
| Pet Coke                          | 1,407,158            | 1,460,090            | 1,924,610            | 674,208             | 1,339,461            | 810,929              | 7,616,457            |
| Oil                               | 238,258              | 302,108              | 138,215              | 213,769             | 242,704              | 256,906              | 1,391,959            |
| Gas                               | 3,080                | 55,408               | 12,670               | 7,674               | 6,159                | -                    | 84,991               |
| <b>Total</b>                      | <b>\$ 12,194,218</b> | <b>\$ 16,419,188</b> | <b>\$ 14,677,605</b> | <b>\$ 7,111,193</b> | <b>\$ 10,042,142</b> | <b>\$ 10,253,333</b> | <b>\$ 70,697,678</b> |

**Big Rivers Electric Corporation**  
**Case No. 2017-00287**

|   | <u>Nov-16</u>        | <u>Dec-16</u>        | <u>Jan-17</u>        | <u>Feb-17</u>       | <u>Mar-17</u>        | <u>Apr-17</u>        | <u>Total</u>         |
|---|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|
| <b>Reconciliation to Form A Filings:</b>                |                      |                      |                      |                     |                      |                      |                      |
| Total Fuel Expense per Form A Filings:                  |                      |                      |                      |                     |                      |                      |                      |
| Coal  | \$ 10,545,722        | \$ 14,601,582        | \$ 12,602,110        | \$ 6,215,542        | \$ 8,453,818         | \$ 9,185,498         | \$ 61,604,272        |
| Pet Coke  | 1,407,158            | 1,460,090            | 1,924,610            | 674,208             | 1,339,461            | 810,929              | 7,616,456            |
| Oil   | 238,258              | 302,108              | 138,215              | 213,769             | 242,704              | 256,906              | 1,391,960            |
| Gas   | 3,080                | 55,408               | 12,670               | 7,674               | 6,159                | -                    | 84,991               |
| <b>Total</b>  | <b>\$ 12,194,218</b> | <b>\$ 16,419,188</b> | <b>\$ 14,677,605</b> | <b>\$ 7,111,193</b> | <b>\$ 10,042,142</b> | <b>\$ 10,253,333</b> | <b>\$ 70,697,679</b> |
| <i>Differences (Detail Above vs FAC Form A Filings)</i> |                      |                      |                      |                     |                      |                      |                      |
| Coal  | \$ -                 | \$ -                 | \$ -                 | \$ -                | \$ -                 | \$ -                 | \$ -                 |
| Pet Coke  | -                    | -                    | -                    | -                   | -                    | -                    | -                    |
| Oil   | -                    | -                    | -                    | -                   | -                    | -                    | -                    |
| Gas   | -                    | -                    | -                    | -                   | -                    | -                    | -                    |
| <b>Total</b>  | <b>\$ -</b>          | <b>\$ -</b>          | <b>\$ -</b>          | <b>\$ -</b>         | <b>\$ -</b>          | <b>\$ -</b>          | <b>\$ -</b>          |

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2016 THROUGH APRIL 30, 2017  
CASE NO. 2017-00287**

**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
Dated September 18, 2017**

**September 29, 2017**

1 **Item 10) *Regarding Big Rivers' off-system sales profits, please provide***  
2 ***the following by month for each month during the period under review:***

3

4 ***a. Provide generation and purchase power (MWHs) allocated***  
5 ***to off-system sales. In the case of Company generation,***  
6 ***provide generation (MWHs) by generating unit. In the***  
7 ***case of purchases, provide the purchase energy in total***  
8 ***purchase MWHs.***

9 ***b. Please provide the generation and purchase power costs***  
10 ***allocated to the off-system sales. In the case of Company***  
11 ***generation, provide generation dollars by generating unit.***  
12 ***In the case of purchases, provide the purchase cost in***  
13 ***total purchase dollars.***

14 ***c. Provide the revenue received for the off-system sales.***

15 ***d. Provide the resulting profit for the off-system sales.***

16

17 **Response)**

18 **a. Please see Attachment No. 1 for Response to Item 9 for the**  
19 **generation and purchased power volumes (MWh) allocated to**  
20 **off-system sales. Big Rivers does not allocate generation to off-**

**Case No. 2017-00287**

**Response to KIUC Item 10**

**Witnesses: Nicholas R. Castlen (a. and b. only) and  
Lindsay N. Durbin (c. and d. only)**

**Page 1 of 2**

**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
ADJUSTMENT CLAUSE OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2016 THROUGH APRIL 30, 2017  
CASE NO. 2017-00287**

**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
Request for Information  
Dated September 18, 2017**

**September 29, 2017**

- 1                   system sales by specific generating unit. Please see Response to  
2                   Item 1 for additional detail.
- 3                   b. Please see the attachment to this response.
- 4                   c. Please see the attachment to this response.
- 5                   d. Please see the attachment to this response.

6  
7  
8  
9  
10

**Witnesses)** Nicholas R. Castlen (*a. and b. only*) and  
Lindsay N. Durbin (*c. and d. only*)

**Big Rivers Electric Corporation**  
**Case No. 2017-00287**

|  | Nov-16         | Dec-16          | Jan-17         | Feb-17         | Mar-17         | Apr-17         | 6-Mo. Total     |
|--|----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|
| <b>Total Off-System Sales Volume</b>   | 530,503.028    | 628,077.218     | 773,719.160    | 477,241.628    | 334,993.235    | 323,014.831    | 3,067,549.100   |
| <b>Total Off-System Sales Revenue*</b> | \$ 14,840,156  | \$ 19,931,734   | \$ 23,936,611  | \$ 15,124,054  | \$ 11,529,641  | \$ 11,037,059  | \$ 96,399,255   |
| Less: Generation Fuel Costs            | \$ (8,319,336) | \$ (11,063,491) | \$ (9,846,618) | \$ (3,756,644) | \$ (5,769,064) | \$ (7,200,859) | \$ (45,956,011) |
| Less: Purchased Power Costs            | (5,093,514)    | (6,361,026)     | (11,629,883)   | (8,893,647)    | (3,459,402)    | (2,088,038)    | (37,525,510)    |
| Less: Environmental Costs              | (1,057,065)    | (1,202,152)     | (1,095,622)    | (453,017)      | (559,842)      | (837,008)      | (5,204,706)     |
| <b>Profit from Off-System Sales</b>    | \$ 370,241     | \$ 1,305,065    | \$ 1,364,489   | \$ 2,020,746   | \$ 1,741,333   | \$ 911,154     | \$ 7,713,028    |

\*Includes Capacity, Energy, and Option revenues

**BIG RIVERS ELECTRIC CORPORATION**

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1 *Item 11) For each month during the period under review in this*  
2 *proceeding, please provide the dollar amount of fuel costs that would have*  
3 *been included in the calculation of the fuel adjustment clause if Big*  
4 *Rivers had assigned its lowest fuel cost generation to native load*  
5 *customers each hour and compare that amount to the dollar amount that*  
6 *was included in the calculation. Please provide the information in the*  
7 *same format as the Attachment to Big Rivers' Response to Commission*  
8 *Staff's Third Request for Information, Item No. 1.c. in Case No. 2014-00230.*  
9 *Please provide all workpapers electronically in spreadsheet format, with*  
10 *all formulas intact. In responding to this Request please ignore any*  
11 *dollar impacts associated with the \$311,111.11 monthly "FAC Credit" paid*  
12 *by Big Rivers pursuant to the Stipulation and Recommendation in Case*  
13 *No. 2014-00455.*

14

15 **Response)** Big Rivers objects to this request on the grounds that it is overly  
16 broad and unduly burdensome. Big Rivers further objects to this request on the  
17 grounds that it is irrelevant and unreasonable because Big Rivers' current  
18 methodology is reasonable and consistent with Commission precedent. Big Rivers'  
19 current fuel cost allocation is built into the determination of its base rates. Big  
20 Rivers' fuel cost allocation methodology was used in the test periods filed in Big  
21 Rivers' last three rate cases and to establish Big Rivers' current rates, which were  
22 approved by the Commission as fair, just, and reasonable. It would be



**BIG RIVERS ELECTRIC CORPORATION**

**AN EXAMINATION OF THE APPLICATION OF THE FUEL  
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**Responses to the Kentucky Industrial Utility Customers, Inc.'s  
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1 unreasonable and a violation of the matching principle to change how Big Rivers  
2 allocates fuel costs between native load and off-system sales for purposes of  
3 calculating FAC charges outside of a general rate case where the reasonableness  
4 of alternate allocations can be considered in the context of Big Rivers' overall  
5 financial circumstances, including whether Big Rivers' rates are still fair, just and  
6 reasonable with such a change.

7           Notwithstanding that objection, Big Rivers has calculated an  
8 estimated impact of "stacking" Big Rivers' units in a method it believes to be  
9 similar to that requested by KIUC. Given the time and inherent complexity  
10 required to perform an hourly stacking calculation, Big Rivers has approximated  
11 the impact by "stacking" on a monthly basis. Please see the attachment to this  
12 response. An Excel file containing this attachment, including all workpapers in  
13 spreadsheet format with formulas intact, is provided on the CD accompanying  
14 these responses.

15  
16  
17  
18

**Witness)** Lindsay N. Durbin

## Big Rivers Electric Corporation

Case No. 2017-00287

|  | Nov-16              | Dec-16              | Jan-17              | Feb-17              | Mar-17              | Apr-17              | Total                |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| <b>As Filed:</b>   |                     |                     |                     |                     |                     |                     |                      |
| Total Generation Fuel Cost   | \$ 12,194,218       | \$ 16,419,188       | \$ 14,677,605       | \$ 7,111,193        | \$ 10,042,142       | \$ 10,253,333       | \$ 70,697,679        |
| Less: MISO Make Whole Payments                                       | (2,110)             | (15,222)            | (6,508)             | (582)               | (7,468)             | -                   | (31,890)             |
| Less: Net Forced Outage Fuel Cost Adjustment <sup>(1)</sup>          | (76,576)            | (60,896)            | (179,523)           | (67,362)            | (126,735)           | (203,746)           | (714,838)            |
| Less: Fuel Cost Assigned to Off-System Sales from Generation         | (8,319,336)         | (11,063,491)        | (9,846,618)         | (3,756,644)         | (5,769,064)         | (7,200,859)         | (45,956,011)         |
| <b>Total Generation Fuel Cost Assigned to Native Load</b>            | <b>\$ 3,796,196</b> | <b>\$ 5,279,579</b> | <b>\$ 4,644,956</b> | <b>\$ 3,286,605</b> | <b>\$ 4,138,875</b> | <b>\$ 2,848,728</b> | <b>\$ 23,994,940</b> |
| Native Load Sales Volumes from Generation (MWh)                      | 164,361.130         | 215,737.089         | 197,189.810         | 125,947.203         | 167,855.330         | 123,717.554         | 994,808.116          |
| <b>Average Generation Fuel Cost Assigned to Native Load (\$/MWh)</b> | <b>\$ 23.10</b>     | <b>\$ 24.47</b>     | <b>\$ 23.56</b>     | <b>\$ 26.10</b>     | <b>\$ 24.66</b>     | <b>\$ 23.03</b>     | <b>\$ 24.12</b>      |

|  | Nov-16              | Dec-16              | Jan-17              | Feb-17              | Mar-17              | Apr-17              | Total                |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| <b>Proforma - Using Stacking Method</b>                              |                     |                     |                     |                     |                     |                     |                      |
| Generation Fuel Cost Assigned to Native Load                         | \$ 4,098,329        | \$ 5,617,823        | \$ 5,048,584        | \$ 3,343,598        | \$ 4,360,634        | \$ 3,043,279        | \$ 25,512,247        |
| Less: MISO Make Whole Payments <sup>(2)</sup>                        | -                   | -                   | -                   | -                   | -                   | -                   | -                    |
| Less: Net Forced Outage Fuel Cost Adjustment                         | (76,576)            | (60,896)            | (179,523)           | (67,362)            | (126,735)           | (203,746)           | (714,838)            |
| <b>Total Generation Fuel Cost Assigned to Native Load</b>            | <b>\$ 4,021,753</b> | <b>\$ 5,556,927</b> | <b>\$ 4,869,061</b> | <b>\$ 3,276,236</b> | <b>\$ 4,233,899</b> | <b>\$ 2,839,533</b> | <b>\$ 24,797,409</b> |
| Native Load Sales Volumes from Generation (MWh)                      | 164,361.130         | 215,737.089         | 197,189.810         | 125,947.203         | 167,855.330         | 123,717.554         | 994,808.116          |
| <b>Average Generation Fuel Cost Assigned to Native Load (\$/MWh)</b> | <b>\$ 24.47</b>     | <b>\$ 25.76</b>     | <b>\$ 24.69</b>     | <b>\$ 26.01</b>     | <b>\$ 25.22</b>     | <b>\$ 22.95</b>     | <b>\$ 24.93</b>      |

|   | Nov-16       | Dec-16       | Jan-17       | Feb-17    | Mar-17      | Apr-17   | Total        |
|---|--------------|--------------|--------------|-----------|-------------|----------|--------------|
| <b>Difference:</b>  |              |              |              |           |             |          |              |
| Difference in Total Fuel Cost Allocated to Native Load            | \$ (225,557) | \$ (277,348) | \$ (224,105) | \$ 10,370 | \$ (95,024) | \$ 9,195 | \$ (802,469) |
| Difference in Average Fuel Cost Allocated to Native Load (\$/MWh) | \$ (1.37)    | \$ (1.29)    | \$ (1.13)    | \$ 0.09   | \$ (0.56)   | \$ 0.08  | \$ (0.81)    |

<sup>(1)</sup> Net Forced Outage Fuel Cost Adjustment = Fuel (assigned cost during Forced Outage) - Fuel (substitute cost for Forced Outage) - Identifiable fuel cost (substitute for Forced Outage)

<sup>(2)</sup> During the review period, MISO Make Whole Payments received for start-up fuel costs related to the Reid CT (for Nov. 2016 through Apr. 2017) and Green Unit 2 (for Mar. 2017 only). Because none of the generation from these units were assigned to native load during those months under the stacking method, none of the corresponding MISO Make Whole Payments received were assigned to native load under the stacking method.